

Work Order ID 69528

Wednesday, May 11, 2011 4:04:45 PM

Page 1

Item ID: D3319-3

Accept

Revision ID:

Item Name: Wearplate

Start Date: 5/11/2011 Start Qty: 8.00

Required Date: 5/16/2011 Req'd Qty: 8.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3319

Rev B

100

0.00



Waterjet

FLOW WATER JET

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3319

☐ Dwg Rev:

B

☐ Prog Rev:

B

☐ 2-

1010 .056

Deburr if necessary

1311-5-25

8

110

0.00



QC

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

Quality Control

1311-5-25

120

0.00



QC

QC8- Inspect parts - second check

Memo

0.00

Quality Control

5 11/05/26

29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Wednesday, May 11, 2011 4:04:45 PM

Page 2

Accept

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Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID

Tool #**Plan
Code**

**Accept
Qty**

Reject
QtyReject
Number

**Insp.
Stamp**

130

0.00

Small Fab

0.00

Memo

Debutt if necessary

140

0.00

NC BRAKE

0.00

Memo

Form using DT8326 & DT8261 as per Dwg D3319Rev:

150

0.00

QC6- Inspect dimensions to drawing

0.00

Memo

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries




Work Order ID 69528

Wednesday, May 11, 2011 4:04:45 PM

Page 3

Item ID: D3319-3 Accept  Setup Start 
Revision ID: Stop 
Item Name: Wearplate
Start Date: 5/11/2011 Start Qty: 8.00  Cust Item ID:
Required Date: 5/16/2011 Req'd Qty: 8.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  Large Fab	Large Fab	0.00							
Large Fab	Memo	0.00				x9		11-08-10	JBL
Large Fab	Weld hard surface using D3319-3T2 per QSI 004 and Dwg D3319 Rev: <input type="checkbox"/> Qty Part Number Description Batch <input type="checkbox"/> A/R N/A 7560 Hardcoat Rod M118453								
170  QC	QC10- Inspect visual per QSI004- ground welds	0.00							
Quality Control	Memo	0.00							Suloo 11
180  QC	QC5- Inspect part completeness to step on W/O	0.00							
Quality Control	Memo	0.00							Suloo 11

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 69528

Wednesday, May 11, 2011 4:04:45 PM



Page 4

Item ID:	D3319-3	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Wearplate					
Start Date:	5/11/2011	Start Qty: 8.00		Cust Item ID:		
Required Date:	5/16/2011	Req'd Qty: 8.00		Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 Memo START TIME: 1:30pm 200pm FINISH TIME: 3:20pm	0.00 0.00				9	0	4108/11	
200 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00						9X 0 M-4/08/11	
210 Packaging Packaging Packaging	Packaging Memo Identify on inside surface using a permanent fine point marker with the following: <input type="checkbox"/> TCCA-PDA, Dart Aerospace Ltd. <input type="checkbox"/> P/N: D3319-3, B/N: BXXXXX <input type="checkbox"/> For Product Eligibility see PDA05-18 <input type="checkbox"/> and Stock <input type="checkbox"/> Location: 491	0.00 0.00						11/12 SP 192	

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Page 5

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Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

OK 11/08/12

H11-08-12
(9)

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Page 1

Wednesday, May 11, 2011 4:04:52 PM

Work Order ID: 69528



Parent Item: D3319-3



Parent Item Name: Wearplate

Start Date: 5/11/2011

Required Date: 5/16/2011

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP: A ☐ 05.05.12 ☐ New issue ☐ KJ/JLM ☐
IPP Rev:B Now on Waterjet 06-10-03 JLM ☐

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M1010S18GA

Purchased

No

100

sf

26.5000

3.2524

27.38863



B11-5-25

1010/1025 SHEET .048

Location

Loc Qty

Loc Code

MAT019

26.5

116268

26.5

117806

117 806

68

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	09528
Description: Wearplate		Part Number:	D3319-3
Inspection Dwg: D3319	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
75.52	+/-0.030	75.52	✓		T R02	
74.420	+/-0.010	74.420	✓		T	
62.770	+/-0.010	62.770	✓		T	
52.890	+/-0.010	52.890	✓		T	
30.790	+/-0.010	30.790	✓		T	
8.690	+/-0.010	8.690	✓		T	
0.60	+/-0.030	0.598	✓		V R01	
2.690	+/-0.010	2.693	✓		V	
2.940	+/-0.010	2.947	✓		V	
3.527	+/-0.010	3.522	✓		V	
4.518	+/-0.010	4.514	✓		V	
Ø0.190	+0.005/-0.001	0.194	✓		V	
2.940	+/-0.010	2.949	✓		V	
2.940	+/-0.010	2.947	✓		V	
2.690	+/-0.010	2.696	✓		V	
5.063	+/-0.010	5.056	✓		V	
6.163	+/-0.010	6.161	✓		V	
Ø0.316 x 0.607	+0.006/-0.001 x +/-0.010	317 x 609	✓		V	
0.048	+/-0.010	0.046	✓		V	

Measured by: B	Audited by: S	Prototype Approval:	N/A
Date: 11-5-20	Date: 11/05/20	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.07.18	New Issue	KJ/JLM	B

W/O:		WORK ORDER CHANGES					
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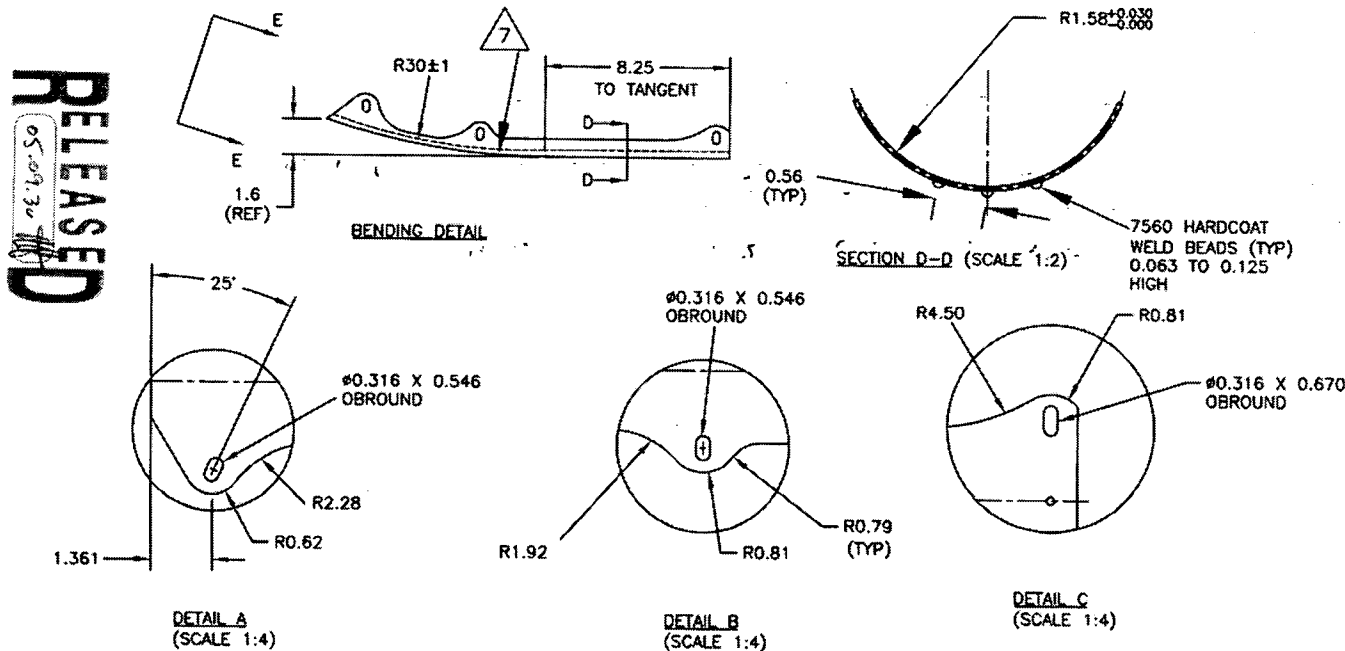
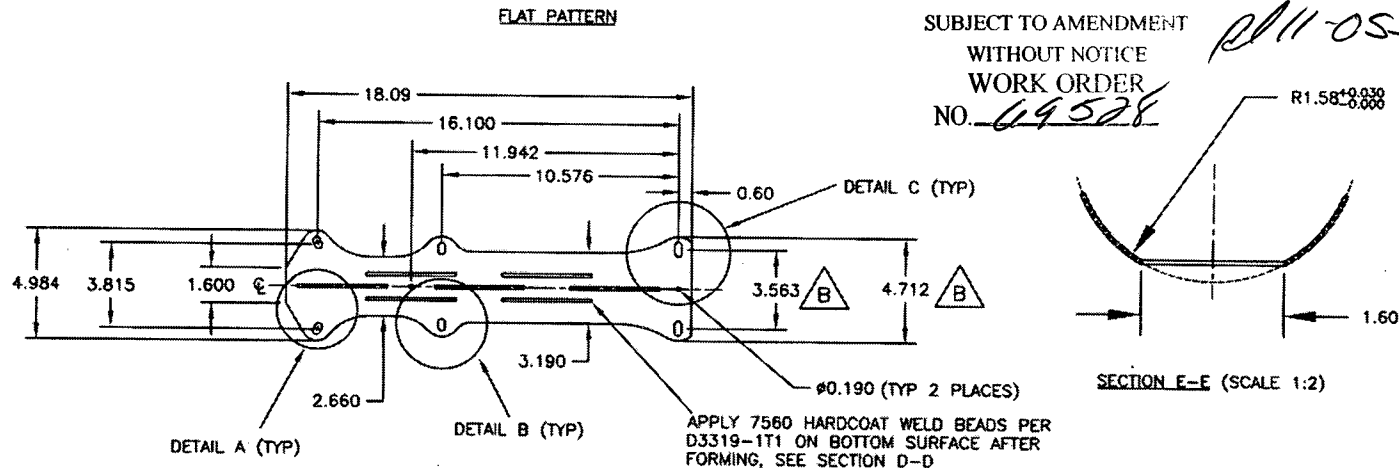
NOTE: Date & initial all entries

SHOP COPY
RETURN TO
ENGINEERING

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 69528

PL 11-05-12

DART



D3319-1 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

DESIGN	DRAWN BY	DART AEROSPACE LTD
P41	P41	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D3319
DATE	TITLE	SCALE
05.06.06	WEARPLATE	1:8
REV.	DATE	DESCRIPTION
A	04.09.24	NEW ISSUE
B	05.06.06	WIDEN HOLES, REDUCE WIDTH -3/-5/-7

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RELEASED
05-09-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

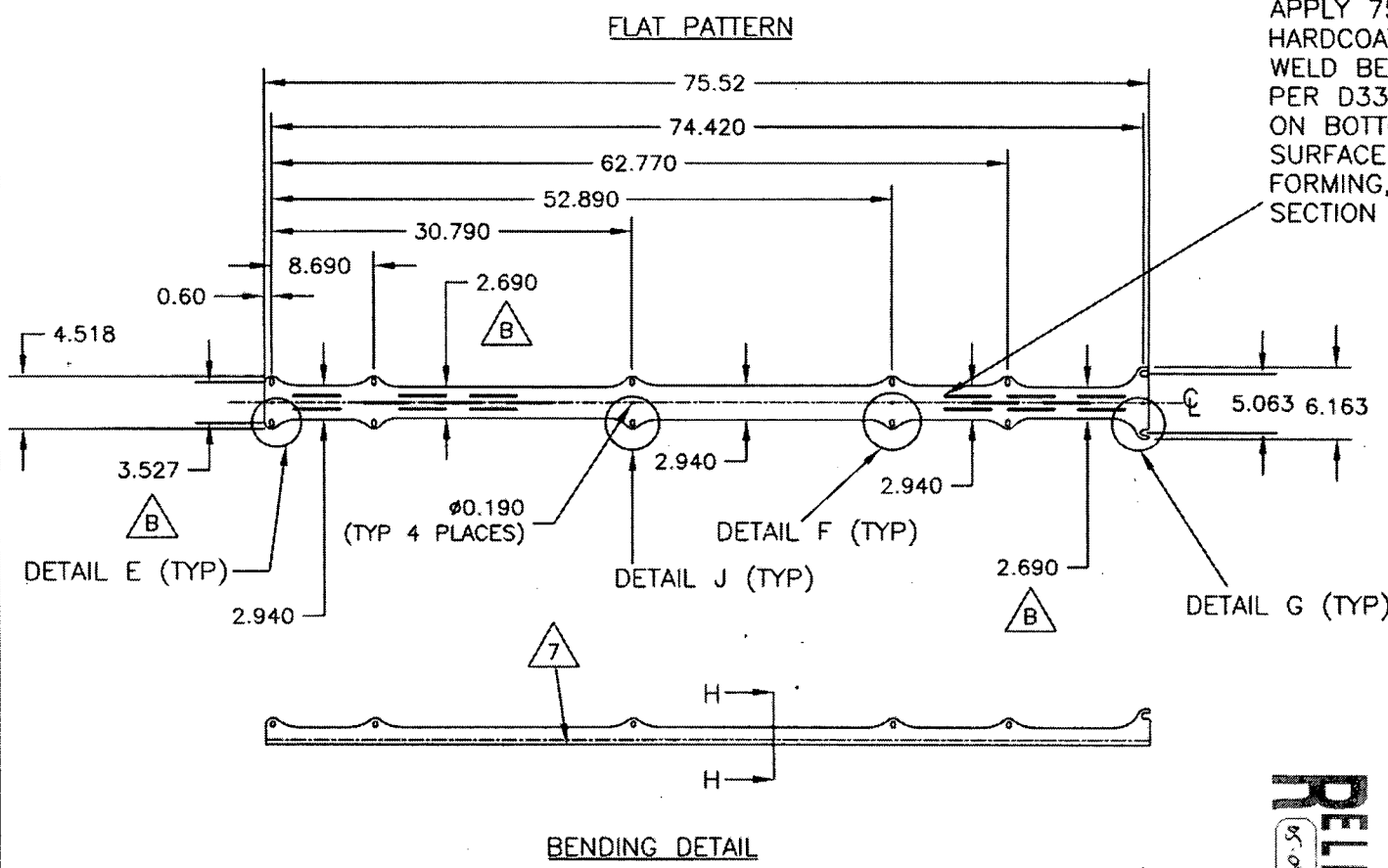
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

u10 09528

DART

APPLY 7560
HARDCOAT
WELD BEADS
PER D3319-3T1
ON BOTTOM
SURFACE AFTER
FORMING, SEE
SECTION H-H



RELEASED
05-07-30

DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	TITLE	REV. B
05.06.06	WEARPLATE	SHEET 2 OF 5
		SCALE 1:15

D3319-3 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-3 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

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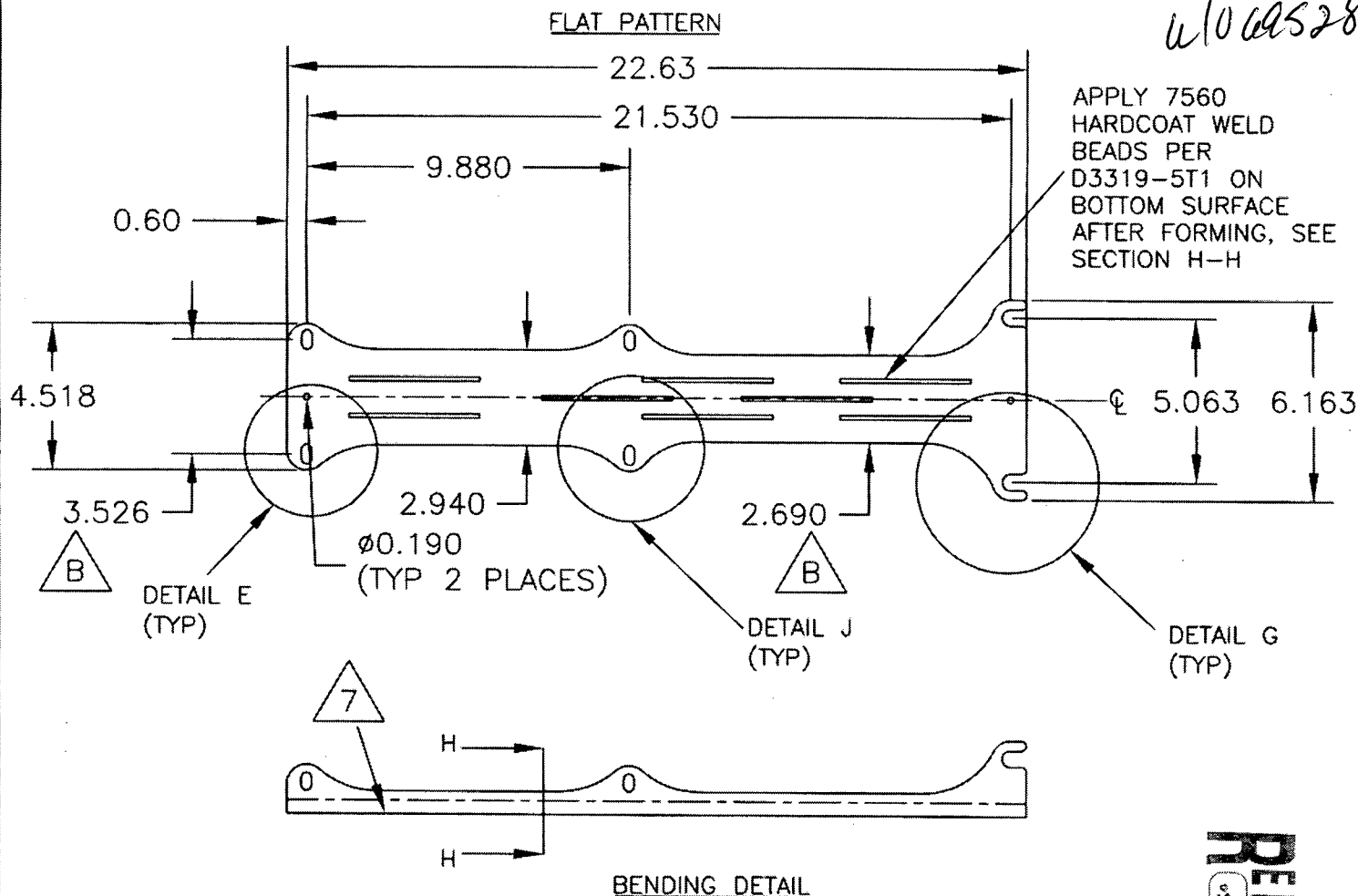
W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3319-5 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-5 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

RELEASED
05.09.30

DART

DESIGN	D41	DRAWN BY	D41	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA
CHECKED	#	APPROVED	#	REV: B
DATE	05.06.06	DRAWING NO.	D3319	SHEET 3 OF 5
TITLE	WEARPLATE	SCALE	1:5	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

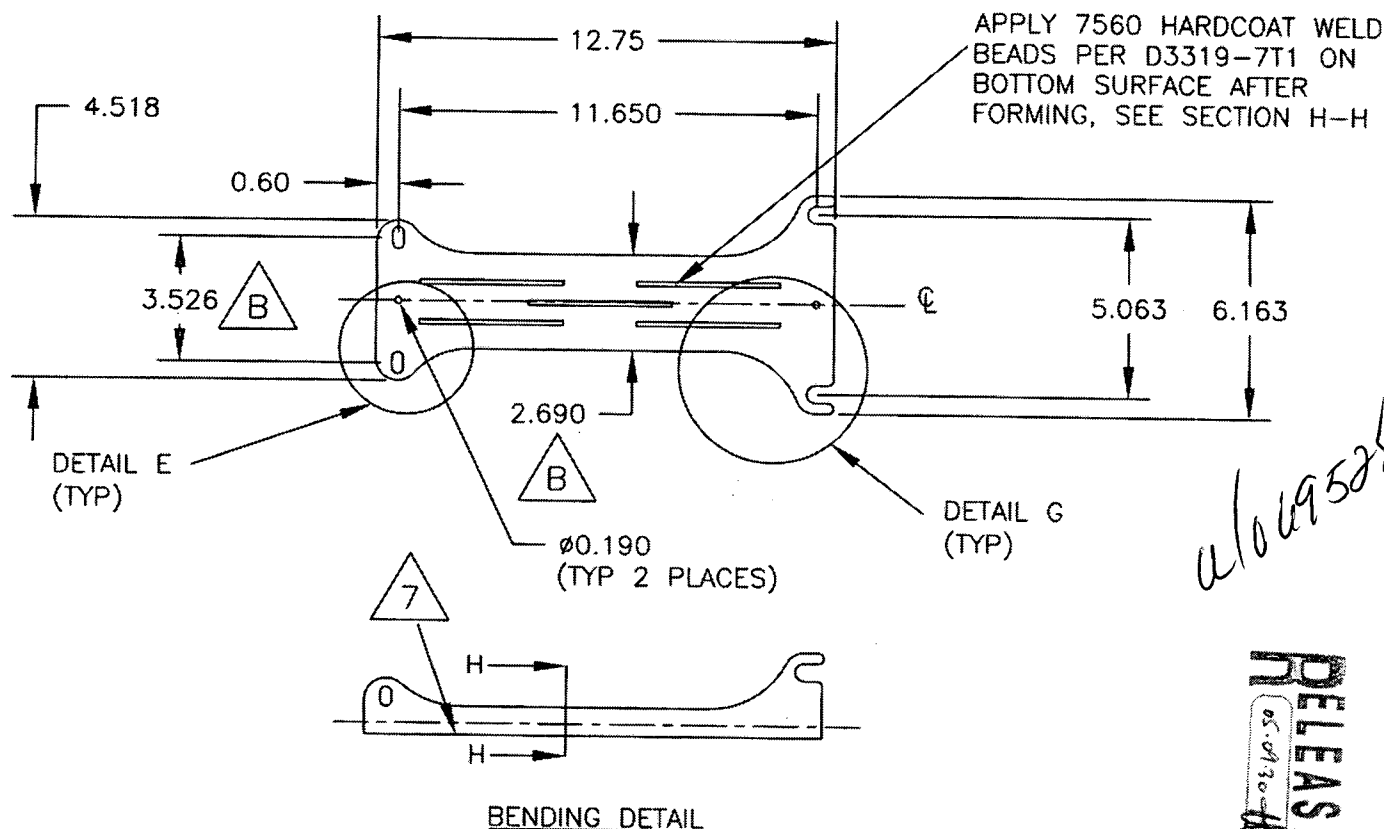


DESIGN	PH	DRAWN BY	GH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	APPROVED	GH	DRAWING NO.	D3319
DATE	05.06.06	TITLE	WEARPLATE	SHEET 4 OF 5	REV. B
		SCALE	1:5		

21069528

RELEASED
05.07.30-44

FLAT PATTERN



D3319-7 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
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- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-7 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

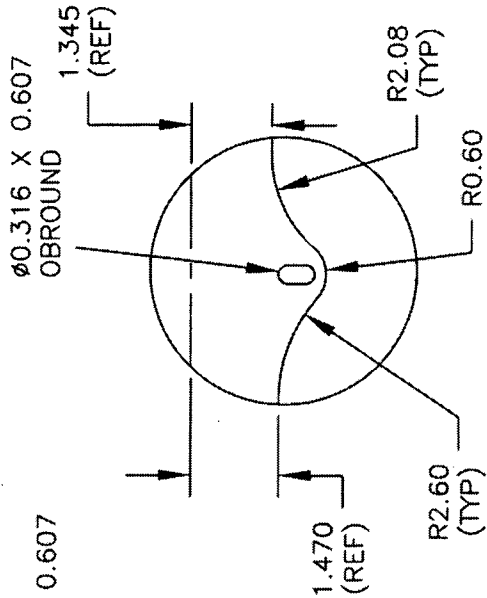
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

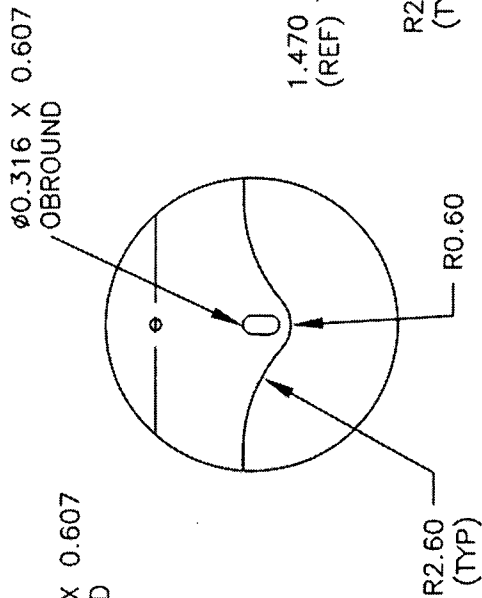
NOTE: Date & initial all entries



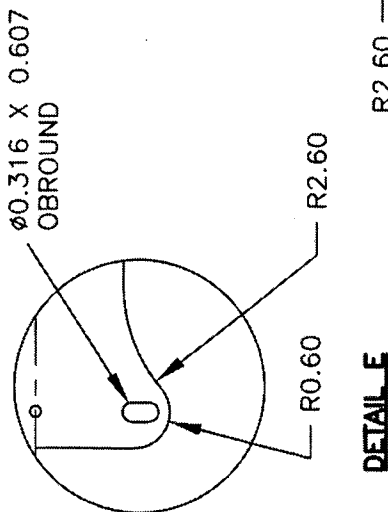
DESIGN <i>PH</i>	DRAWN BY <i>PH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3319	REV. B SHEET 5 OF 5
DATE 05.06.06	TITLE WEARPLATE		SCALE 1:3



DETAIL J

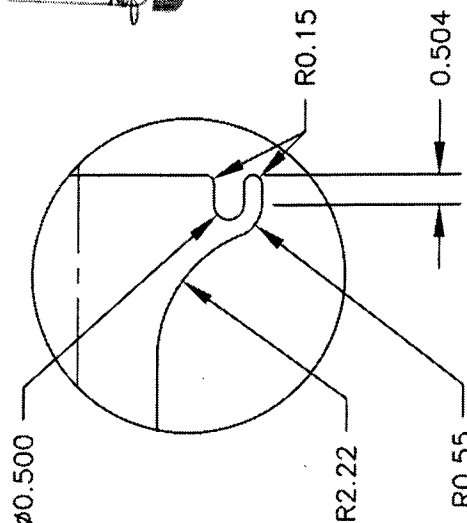


DETAIL F

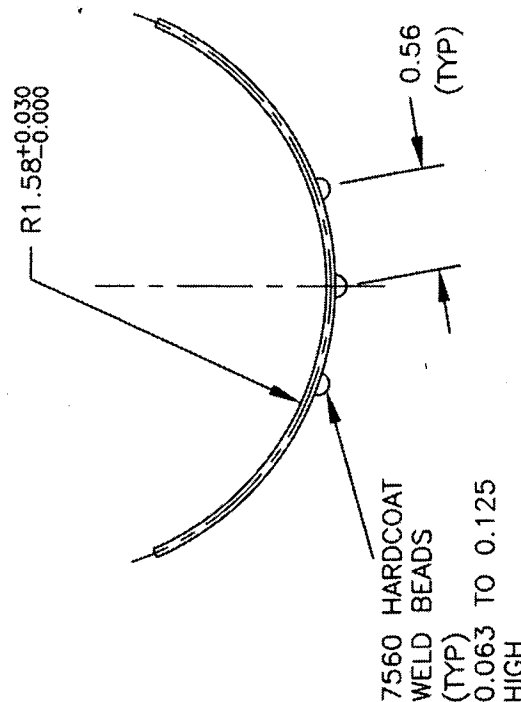


DETAIL E

RELEASED
05.09.30



DETAIL G



SECTION H-H
(SCALE 1:1)

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